

REMARKS

The Office Action of September 27, 2006, has been received and reviewed. Claims 1, 6, 7, 9, 11-15, and 21-25 are currently pending in the application. Claims 1, 6, 7, and 9 were previously withdrawn from consideration. Claims 11-15 and 21-25 are under consideration. Claims 11-15 stand rejected. Claim 11 is amended herein. New claims 21-27 have been added herein. Basis for the new claims exists throughout the Specification and more particularly in original claims 11-15 and ¶ [0066]. All amendments are made without prejudice or disclaimer. No new matter has been presented. Reconsideration is respectfully requested.

Petition for Extension under 37 C.F.R. § 1.136(a)

The applicant hereby petitions for a three month extension under 37 C.F.R. § 1.136(a). A check in the amount of \$1,020.00, check number 11031, is enclosed. Should the check be insufficient for any reason, the Commissioner is authorized to charge the fee to deposit account 20-1469.

Interview

Applicant wishes to thank the Examiner for the interview of March 15, 2007. As was agreed at the time of the interview, amending claim 11 to recite "wherein the nucleotide sequence hybridizes to the full length nucleotide sequence of SEQ ID NO:37" would overcome 35 U.S.C. § 112, first paragraph, and 35 U.S.C. § 102(b) rejections of record.

Rejections under 35 U.S.C. § 112, first paragraph

Claims 11-15 stand rejected under 35 U.S.C. § 112, first paragraph, as assertedly failing to comply with the written description and enablement requirements. Applicant respectfully traverses the rejections as hereinafter set forth.

Although the applicant does not agree that any of the claims are not enabled or lack supporting written description, to expedite prosecution, claim 11 has been amended herein. Specifically, at the suggestion of the Examiner, claim 11 has been amended to recite "wherein the nucleotide sequence hybridizes to the full length nucleotide sequence of SEQ ID NO:37." As

the Examiner indicated in the interview of March 15, 2007, such an amendment would overcome the 35 U.S.C. § 112, first paragraph, rejections. Consequently, applicant respectfully requests that the rejections be withdrawn and the claims reconsidered.

In addition, because the structure of the isolated or recombinant nucleic acid of claim 11 references SEQ ID NO: 37, the nature and description of a nucleotide sequence capable of hybridizing to the full length of SEQ ID NO: 37 would certainly be clear to a person ordinarily skilled in the art.

As to enablement, in the Specification, SEQ ID NO: 37 was used as a probe to identify (by hybridization) a chromosomal DNA fragment of *S. suis* serotype 2. A 5kb EcoRI fragment was identified and cloned in pGEM7Zf(+) yielding pFBPS7-46 which is depicted in FIG. 1. (Specification, as-filed, page 35, lines 6-10, paragraph [0066]).

The nucleic acid of SEQ ID NO: 37 is not only capable of hybridizing with the nucleic acid of a *S. suis* serotype 2, but also with a large number of *S. suis* strains of other serotypes. Thus, the nucleic acid of claim 11 identifies a candidate for a cross-protective vaccine against various serotypes of *S. suis*.

In view of the foregoing, applicant respectfully submits that the application meets the requirements of 35 U.S.C. § 112, first paragraph, and asks that the rejections be withdrawn.

Rejections under 35 U.S.C. § 112, second paragraph

Claims 11-15 stand rejected under 35 U.S.C. § 112, second paragraph, as assertedly being incomplete for omitting essential elements. Specifically, it was thought that claim 11 omits essential wash criteria. *Office Action* mailed September 29, 2006, at page 7. Applicant respectfully traverses the rejections as hereinafter set forth.

M.P.E.P. § 2172.01 relates that:

a claim which fails to interrelate essential elements of the invention as defined by applicant(s) in the specification may be rejected under 35 U.S.C. 112, second paragraph, for failure to point out and distinctly claim the invention. See *In re Venezia*, 530 F.2d 956, 189 USPQ 149 (CCPA 1976); *In re Collier*, 397 F.2d 1003, 158 USPQ 266 (CCPA 1968). But see *Ex parte Nolden*, 149 USPQ 378, 380 (Bd. Pat. App. 1965) ("[I]t is not essential to a patentable combination that there be interdependency between the elements of the claimed device or that all the elements operate concurrently toward the desired

result"); *Ex parte Huber*, 148 USPQ 447, 448-49 (Bd. Pat. App. 1965) (A claim does not necessarily fail to comply with 35 U.S.C. 112, second paragraph where the various elements do not function simultaneously, are not directly functionally related, do not directly intercooperate, and/or serve independent purposes.)

Applicant submits that as a wash is not currently recited in claim 11, claim 11 cannot be rejected for the failure to interrelate a wash with the rest of the claim.

Applicant further submits that she is not required to interrelate any wash steps to claim 11 as washing is not an essential element of the claim. Applicant notes that claim 11 relates, in part, to conditions under which nucleic acid molecules will hybridize to a specified sequence. Applicant respectfully submits that it is not essential to further define the compositions as remaining bound after a number of washing steps as the compositions are already adequately defined.

In addition, applicant submits that she is not required to include any additional washing steps as the claims currently pending are composition claims and not method claims. As such, additional steps, such as a wash, are not required to arrive at a claimed result.

In view of the foregoing, applicant respectfully requests the withdrawal of the rejections under 35 U.S.C. § 112, second paragraph, and reconsideration of the claims.

Rejections under 35 U.S.C. § 102(b)

Claims 11, 12, and 15 stand rejected under 35 U.S.C. § 102(b) as assertedly being anticipated by the 1997/1998 Stratagene catalog (pg. 118, 1997/1998) (hereafter "Stratagene"). Specifically, it was asserted that

The Stratagene catalog teaches a kit comprising a collection of random primers. The collection comprises a multitude of isolated and purified nucleic acid molecules (i.e. primers), each of which consists of 6 nucleotide residues. The collection comprises nucleic acid molecules having every possible 6-nucleotide sequence Therefore the kit comprises an isolated nucleic acid molecule consisting of a polynucleotide sequence that is, itself, fully complementary to a nucleotide sequence of a nucleic acid molecule having SEQ ID NO:37. *Office Action* mailed September 27, 2007, at page 8.

Applicant respectfully traverses the rejections as hereinafter set forth.

Although the applicant does not agree that Stratagene anticipates claims 11, 12, and 15, to expedite prosecution, claim 11 has been amended herein. Specifically, at the suggestion of the Examiner, claim 11 has been amended to recite “wherein the nucleotide sequence hybridizes to the full length nucleotide sequence of SEQ ID NO:37.” As the Examiner indicated, in the interview of March 15, 20007, such an amendment would overcome the 35 U.S.C. § 102(b) rejections, applicant respectfully request that the rejections be withdrawn and the claims reconsidered.

In addition, “a claim is only anticipated if each and every element as set forth in the claims is found, either expressly or inherently described, in a single prior art reference.” *Verdegaal Bros. v. Union Oil Co. of Cal.*, 814 F.2d 628, 631 (Fed. Cir. 1987). Applicants respectfully assert that claims 11, 12, and 15 cannot be anticipated by Stratagene as Stratagene does not teach each and every element of the claims.

Claim 11, as amended, recites “wherein the nucleotide sequence hybridizes to the full length nucleotide sequence of SEQ ID NO:37.” Applicant respectfully submits that the 6mers of Stratagene cannot anticipate claim 11, as amended, as the 6mers are not individually capable of hybridizing to the full length of the nucleotide sequence of SEQ ID NO:37. As such, the 6mers of Stratagene cannot anticipate claim 11, as amended.

In view of the foregoing, applicant respectfully requests the withdrawal of the rejection of claim 11 under 35 U.S.C. § 102(b) and reconsideration of same. In addition, applicant respectfully submits that claims 12 and 15 are allowable, *inter alia*, as depending from allowable claim 11. As such, applicant further requests the withdrawal of the rejections of claims 12 and 15 under 35 U.S.C. § 102(b) and reconsideration of same.

CONCLUSION

In light of the above amendments and remarks, applicant respectfully requests reconsideration of the application. If questions remain after consideration of the foregoing, or if the Office should determine that there are additional issues which might be resolved by a telephone conference, the Office is kindly requested to contact applicant’s attorney at the address

Attorney Docket No.: 2183-6055US

or telephone number given herein.

Respectfully submitted,



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Enclosures: Supplemental Information Disclosure Statement
Petition for Extension of Time (3 months)